

249 Analysing the Impact of Consumer Tendency in HORECA Distribution Models

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Abstract: With increasing complexity of today's consumer requirements, food industry decision makers should be able to respond to consumer needs much faster than ever before. The preliminary studies showed that for improving the performance and selecting suitable distribution models, decision makers in food industries should classify different types of consumers and based on the classification prepare different distributions flows. By studying the HORECA distribution channel, this paper suggest that, logistics decision makers should investigate the relationship between consumers' characteristics and urban freight distribution strategy in order to respond to the exact needs and in the follow to reduce the logistics cost.

Keywords: HORECA Channel; Distribution Model; Urban/City Logistics; consumer Tendency.

1 Introduction

In last few years, many small cities have been converted to metropolitan's areas and many big cities even turned to mega cities (e.g. Lahore and Kinshasa cities) "Demographia World Urban Areas, 10th annual Edition, 2014", which clearly shows tendency of population to leave in urban areas instead of rural areas. Along with that, changes have been occurred with the habit of all around the world's society-life food consumption, especially with foods which have taken place outside of home. Meanwhile, it has been generated many issues and concerns that would be worthy to be investigated, particularly in urban context (with many inhabitants). For instance, some classical logistics problems had become more

complex, such as, network design problems, vehicle routing and order fulfillment or returns management.

Most of metropolitans are dealing with the various model of city logistics for delivering freight and to distribute in the urban areas. Thus, this has made researchers such as Russo & Comi (2011) and Suksri & Raicu (2012) to investigate the ways for improving economic efficiency and make sustainable environment in urban distribution. One of the most recently growing interested area in the good distribution is in HORECA (Hotels, Restaurants and Catering) food service sector. This channel has a great impact on the socio Communities consumer, and is established by a complex structure in which a variety types of businesses and activities which are integrated and chain to each other. For instance, HORECA facilities for having direct consumption of food outside the home can be named such as bars, restaurants, fast-food chains, hospitals, schools, etc.

Today's world, in some urban population consumes of their foods (e.g. meals, beverages, breads, etc.) inside HORECA channel are averagely 33% (Li 2006; Anon 2012), which is one of the major components in urban life. Since, urban are an entity where distribution and consumption activities are located, city logistics maintains as a base relationships within HORECA, (Comi, Donnelly, & Russo, 2014). Thus, some industries were interested and allocated "around 30% of their total distribution, while for others it is less than 10%," (Ponce-Cueto & Carrasco-Gallego 2009; Ibeas et al. 2012).

Many of the food industries are seeing themselves into this channel as an essential element of the market for their products, which requires a marketing strategy specifically tailored to the characteristics and expectations of this particular way of food consumption. This paper is attempting to classify and define HORECA customers and consumers in order to explain their relationship between them and urban distribution strategy which has chosen by logistics decision makers.

2 Methodology

In this research paper scientific journals, conference proceedings and annually consumption reports by Ministry of Agriculture, Food and Environment have been reviewed as sources for HORECA distribution models, city logistics and consumptions. Following list of keywords (and their combination) are used for search: "urban distribution model", "city logistics", "distribution model and consumption", "city logistics and consumers", and "HORECA distribution". The online databases such as Pro Quest, Emerald, Science Direct, Scopus, Web of Science, and Google Scholar are used for searching HORECA distribution models and city logistics. In addition, Referred conference proceedings from international Conference on Computers & Industrial Engineering have also reviewed.

3 Literature Review

Urban distribution concept was first established and modelled by Ogden 1992 and became starting point for other urban models (Fernandez-Barcelo & Campos-Cacheda, 2012). Since then, many studies have developed a strategy to identify solutions for improving life quality, managing resources efficiently, reducing social and economic costs and protecting social environment (Russo & Comi, 2012) such as reducing traffic congestion, air and noise pollution, and the road accidents (Browne, Allen, Nemoto, Patier, & Visser, 2012). Moreover, Ogden study showed each city logistics have objectives which can be categorized in following groups: 1) Economic 2) Efficiency 3) Road-safety 4) Environment 5) Infrastructure & management 6) Urban structure (Anand, Quak, van Duin, & Tavasszy, 2012). Most popular objectives which researchers have been focusing on these days are, efficiency, environmental and economic objectives (Farahani et al. 2013; Yang et al. 2013; Russo & Comi 2012).

However, according to Gonzalez et al. (2012), it is not easy to compare each model to another “without taking into account fundamental functions differences.” (Jesus Gonzalez-Feliu & Routhier, 2012). Thus, models were categorized with their function and divided them into four groups: 1) Estimating demand models, 2) Fixed-demand models, 3) Multi-actor simulation models and 4) Macro-economic and public decision support models (Jesus Gonzalez-Feliu & Routhier, 2012). Nevertheless, the most growing works in city logistics are related to the fix-demand models (Gonzalez-Feliu 2011; Russo & Comi 2011). Although, it can create city logistics model base on high information quality of city logistics problems; but, developing and validating models as well as assessing the final outcomes from applying the model is much more important (Taniguchi, Thompson, & Yamada, 2012).

However, with the all classification, yet there is no official delimitation of what commonly called HORECA is and to which function or channel is related. This uncertainty causes and high consumption which distributed averagely between 30% and 33% by major food industries, made this sector to be important to investigate (Russo & Comi, 2013). It has demonstrated the majority of activities in many worldwide metropolitan, city centers and urban areas (Schoemaker et al., 2006; Comi et al., 2011). Since that small but growing part of researchers in the last few years are focusing and proposing some urban good distribution model in this sector for goods and general merchandise (Ponce-Cueto & Carrasco-Gallego 2009; Arvidsson 2013; Crainic et al. 2004).

In general, this literature reviewing was attempted to introduce the fundamental structure of urban good distribution models. It has defined and identified the objectives and functions in order to prepare a suitable distribution model in this sector for food industries.

4 Description of HORECAChannel

Many articles mainly discussed about urban distribution channel, -logistics strategy and performance evaluation(Wisetjindawat et al. 2012;Suksri & Raicu 2012). Among them, particular important channel has been grown as HORECA which have impact on HOtels, REstaurants and CAterings. In fact, HORECA activities are assumed as the end consumers because of being the final destination of goods. Since, the large amount of loads that are moved and distributed in this sector, the process of their decisions is quite same as retailers (Comi et al., 2014). Therefore, the main actors in this distribution model are: 1- Point of sales (hotels, restaurant, bars, and caterings), 2- Final decision makers (consumers) and 3- Distributors.

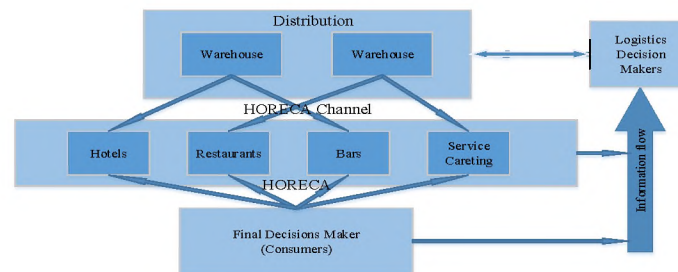


Fig.1 Distribution models in HORECA

Relationship between actors and information sharing flows which are taken place among them, is shown in Figure 1. Logistics decision makers receive information related to service level, quantity (demand) and cost (Jiang et al. 2013;Zhang et al. 2013) which are the three main aspects to take into account to design the distribution logistics network in this context. These items make logistics decision makers toopt and design suitable distribution based on consumer's information and point of sales information to improving customer level and reduce costs. In the following section, main characteristics of point of sales in HORECA channel will be described.

4.1 Sales Characteristics in HORECA Channel

The consumption of food and beverages away from home can be performed by multiple methods and / or types of companies. However, continually new companies will appear. Based on activities carry out by companies, two categories can be proposed:

1. Commercial catering: These types of companies will be preparing directly own food and beverages for individualized consumer choices through local outlets and can be classified as:

- Traditional companies (Non-organized): retailers like as small bars and restaurants, some hotels and cafeterias.
- Modern companies (organized): new forms of selling food which are including fast-food chains (fast food), the local take-away (takeaway) or restaurant chains.

2. Service catering: these kind of companies categorized their own members as certain distinct groups by the character and use of service. They will provide central kitchens or similar and prepare the uniformity of the menus offered. For example, companies or institutions which provide their food and beverage for such as hospital chains, schools buffet, aircrafts, trains and ships catering, etc.(Ponce-Cueto & Carrasco-Gallego 2009; Breu et al. 2008).

Table 1 Classification of HORECA companies based on activities

A. Commercial Catering		
Point of sale	Traditional Companies	Modern Companies
Serving Tourist & Public Caterings	<ul style="list-style-type: none"> •Traditional cafeterias and Restaurants. •Inns, Hotel apartments, and hostel restaurants. 	<ul style="list-style-type: none"> •Restaurants chains and cafes in Hotels chains, Campsites chains, etc.
Specialized-Servicing	<ul style="list-style-type: none"> •Small and TraditionalFast-food (burger, Pizzeria, etc.) 	<ul style="list-style-type: none"> •Fast-food chains, Vending machines •Take away •Buffet / Self services
Selling Beverage	<ul style="list-style-type: none"> •Mini-bars, Coffee-bar, Taverns, etc. •Clubs, Halls&Nightlife and other shows, etc. 	<ul style="list-style-type: none"> •Chains of cafes &bars (Starbucks) •Chains breweries, Beverages (milk, etc.)
Selling snacks		<ul style="list-style-type: none"> •Vending machines •Kiosks, Ice cream stands
B. Service Catering		
<ul style="list-style-type: none"> • Dining Company (public or private) • Catering institutions(central kitchens or similar) • Catering visitor (planes, trains, ships, etc.). • Catering specializing in events (weddings, parties, banquets, etc.) • Catering Home / individualized service 		

4.2 Consumer's Characteristics in HORECA Channel

It is significant to identify the consumer's characteristics which are the consumptions of this sector. Thus, some researchers studied consumer movement which travels from their residence to these sectors and called them as the final decision-makers. So, end consumers can be called as the final decision-makers for these kind of movements (Russo & Comi, 2011). This make decision maker in industries to identify and to distinguish their needs and follow their trends. According to Breu et al. (2008) study, industries decision makers can classify consumer in the following categories:

- The tourism expansion
- The rapid development of immigration.
- The increasing weight in population of older people.(40>)
- The changes in habits and attitudes of young people.(40<)

However, end-consumer consumption, trends consumption and HORECA activities (e.g. advertising, promotion, etc.) have impact on HORECA distribution channel such as delivery size, frequency's characteristics, service level, and cost of delivery (Council, 2008). In fact, the freight distribution flows depend on end-consumer residence location and their attitude and behavior. Furthermore, some consumer's characteristics, such as age, gender, income, family dimension, education background, regions and lifestyle (Comi et al., 2014) affects to demands requirements at point of sale and therefore to HORECA distribution models. Although, companies are trying to be more flexible; but, lacking the proper information flow and decision support systems and feeling the pressure to change and select the proper city logistics model to face with growing populations (Muñuzuri, Cortés, Guadix, & Onieva, 2012) and to respond their consumer's needs.

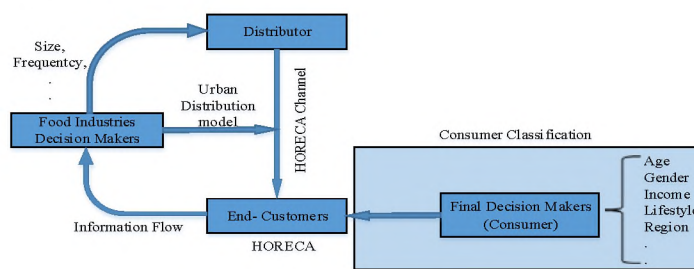


Fig. 2: HORECA Decisions based on consumer's information

In general, logistics decision makers should primarily increase their information about the consumer's characteristic and their trends in order to

decision taken process for designing distribution models in HORECA channel, be more efficient. Eventually decision makers can opt suitable distribution model in this sector, from many studies which indicated the distribution model such as “modelling freight transport”(Comi et al., 2014), “distribution models for logistics in HORECA channel”(Ponce-Cueto & Carrasco-Gallego, 2009).

5 Conclusion

Based on this research, a growing importance of around 30% and 35% have been identified in the “food consumption outside the home” in last few years. This has made attention to food industries decision makers for increasing their information about this sector and their consumers. Thus, this paper proposed a first classification and definition for HORECA customers and consumers and explain the relationship between consumers’ characteristics and urban freight distribution strategy. Since the strategy and selecting suitable urban distribution model in this channel is depending on delivery size, frequency service level, and cost of delivery among others factors, logistics decision makers should be able to analysis the food consumption inside the HORECA which is based on the diet consumed and consumer tendency and characteristics.

In the further development, it should be study in-depth with real and empirical data to analyze the impact between consumers’ characteristics and urban freight distribution strategy in order to reduce logistic cost by opting and preparing suitable distribution in last mile logistics.

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